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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary**Application No.**

09/657,068

Applicant(s)

BUCKLAND, KENNETH M.

Examiner

ROBERT WILSON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-16,18-33,35-38 and 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-16,18-33,35-38 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice or Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, & 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over

O'Dell (U.S. Patent No.: 6,891,825) in view of Yamikita (U.S. Patent No.: 5,956,681)

Referring to claim 1, O'Dell teaches: A method (Fig 6A performs the method per col. 2 lines 15-45) for processing traffic in an access network comprising:

Receiving a plurality of ingress traffic streams, (The DSLAM (614) receives a stream of PPP packets from each of 605, 611, & 613 per Fig 6A. Each stream of PPP packets is an ingress traffic stream)

each ingress traffic stream including a plurality of packets wherein the packets are Internet Protocol (IP) packets (Each input from 605, 611, & 613 or ingress traffic stream includes a plurality of PPP packets which are internet protocol packets per col. 2 lines 15-45)

aggregating the ingress traffic streams into a single combine traffic stream without regard to any destination of any packet from an ingress traffic stream (The DSLAM aggregates input from 605 or first ingress stream with input from 611 or second ingress stream with input form 613 or third ingress traffic stream into a combine stream which is output to 615 without regard to destination per col. 2 lines 16-45)

transmitting the combined stream to a backbone network for routing (The aggregated inputs or combine stream is transmitted to 615 or backbone network to 621 where the traffic is routed per col. 2 lines 16-45)

O'Dell does not expressly call for: packets having a destination address and each Internet Packets includes an IP destination address

Yamikita teaches: packets having a destination address (Fig 6A, 6B, and & 7Aa show PPP packets with destination address per col. 13 line 60 to col. 14 line 30) and each include an IP destination address (Destination IP address per Fig 6A, 6B, and & 7Aa show PPP packets with destination address per col. 13 line 60 to col. 14 line 30)

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It would have been obvious to one of ordinary skill in the art at the time of the invention to add destination address of Yamikita to the PPP packet processing of O'Dell in order for the processing to be able to transfer packets from the source to a destination. It would have been obvious to one of ordinary skill in the art at the time of the invention to add IP destination address of Yamikita to the PPP packets of the combination of Kita and Odell in order for the packets to be delivered once they reach the Internet using Internet Protocol which is a standards based protocol.

In addition O'Dell teaches

Regarding claim 3, further comprising:

receiving each of the ingress traffic streams from customer premises equipment (CPE) (The DSLAM (614) receives the ingress traffic streams from the DSL modems (605, 611, & 613) which are CPE per col. 2 lines 16-45)

and transmitting the combined traffic stream to a backbone traffic in the backbone network (The DSLAM (614) transmits the combined traffic to router (621) via the data network for routing per Fig 61 and per col. 2 lines 16-45)

transmitting the combined traffic stream to a backbone traffic in the backbone network (Access Node Transmits the traffic to Service Provider Node which contains a Router which is connected to the Internet Backbone per Fig 1)

Referring to claim 26, O'Dell teaches: A system for processing traffic in an access network (Fig 6A performs the method per col. 2 lines 15-45) for processing traffic in an access network comprising:

Logic stored in a computer process able medium (instructions stored in a memory or computer process able medium per col. 8 lines 9 to 28)

The logic operable to (instructions or logic per col. 8 lines 9 to 28) receive a stream of PPP packets from each of 605, 611, & 613 per Fig 6A. Each stream of PPP packets is an ingress traffic stream)

each ingress traffic stream including a plurality of packets wherein the packets are Internet Protocol (IP) packets (Each input from 605, 611, & 613 or ingress traffic stream includes a plurality of PPP packets which are internet protocol packets per col. 2 lines 15-45)

aggregating the ingress traffic streams into a single combine traffic stream without regard to any destination of any packet from an ingress traffic stream (The DSLAM aggregates input from 605 or first ingress stream with input from 611 or second ingress stream with input from 613 or third

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ingress traffic stream into a combine stream which is output to 615 without regard to destination per col. 2 lines 16-45)

transmitting the combined stream to a backbone network for routing (The aggregated inputs or combine stream is transmitted to 615 or backbone network to 621 where the traffic is routed per col. 2 lines 16-45)

O'Dell does not expressly call for: packets having a destination address and each Internet Packets includes an IP destination address

Yamikita teaches: packets having a destination address (Fig 6A, 6B, and 7Aa show PPP packets with destination address per col. 13 line 60 to col. 14 line 30) and each include an IP destination address (Destination IP address per Fig 6A, 6B, and 7Aa show PPP packets with destination address per col. 13 line 60 to col. 14 line 30)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add destination address of Yamikita to the PPP packet processing of O'Dell in order for the processing to be able to transfer packets from the source to a destination. It would have been obvious to one of ordinary skill in the art at the time of the invention to add IP destination address of Yamikita to the PPP packets of the combination of Kita and Odell in order for the packets to be delivered once they reach the Internet using Internet Protocol which is a standards based protocol.

In addition O'Dell teaches

Regarding claim 27, the logic further operable to receive each of the ingress traffic streams from customer premise equipment (The instructions receive input streams from each of the DSL modems or CPE per Fig 6A and per. col. 2 lines 16-45)

Regarding claim 28, the logic further operable to transmit the combine traffic stream to a backbone router in the backbone network (the instructions or logic cause the DSLAM to transmit the combine traffic streams to backbone router (621) via backbone network (615) per Fig 6A and per col. 2 lines 16-45)

3. Claims 4 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dell (U.S. Patent No.: 6,891,825) in view of Yamikita (U.S. Patent No.: 5,956,681) further in view of Banas U.S. Patent No.: 6,353,619)

Referring to claim 4, the combination of O'Dell and Yamikita teach: the method of claim 1 and IP packets in the ingress stream

The combination of O'Dell and Yamikita do not expressly call for: validating IP packets

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Banas teaches: validating IP packets (validating per col. 5 lines 2-14)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the validating of IP packets of Banas to the IP packet processing of the combination of O'Dell and Yamikita in order to insure that the packets are not illegal addresses in order to protected against processing corrupted packets.

Referring to claim 29, the combination of O'Dell and Yamikita teach the system of claim 26 and logic further operable to process IP packets in the ingress stream

The combination of O'Dell and Yamikita do not expressly call for: validating IP packets

Banas teaches: validating IP packets (validating per col. 5 lines 2-14)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the validating of IP packets of Banas to the IP packet processing of the combination of O'Dell and Yamikita in order to insure that the packets are not illegal addresses in order to protected against processing corrupted packets.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dell (U.S.

Patent No.: 6,891,825) in view of Nagami (U.S. Patent No.: 5,835,710)

Referring to claim 16, O'Dell teaches: A system (Figure 5 is a system which implemented the per Fig 6A per col. 2 lines 15-45) for processing traffic in an access network comprising:

Means for aggregating a plurality of ingress traffic streams from customer premise equipment (CPE) into a single combined traffic stream for transmission to a backbone network (The DSLAM aggregates input from 605 or first ingress stream with input from 611 or second ingress stream with input from 613 or third ingress traffic stream or means for aggregating into a combine stream which is output to 615 without regard to destination for transmission to Internet or backbone network per col. 2 lines 16-45)

Means for routing egress traffic received from the backbone network to CPE (Router (621) or means for routing packet received or egress traffic from the Internet or backbone to DSL modems or CPE per Fig 6A and per col. 2 lines 16-45) wherein the ingress and egress traffic include a plurality of Internet protocol packets each having an IP address (PPP packets or internet packets are received from DSL modems or ingress and IP traffic is received from Internet both packets inherently carry an IP address per Col. 2 lines 16-45) wherein the plurality of ingress traffic streams are aggregated into the single combined traffic stream without regard to any destination of any IP packet from any ingress traffic (The DSLAM aggregates input from 605 or first ingress stream with input from 611 or second ingress stream with input form 613 or

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third ingress traffic stream into a combine stream which is output to 615 without regard to destination per col. 2 lines 16-45)

O'Dell does not expressly call for: using a static routing table or using IP address to index to in the static routing table

Nagami teaches: using IP address to index a static routing table per col. 13 line 48 and col. 14 lines 22-23 as shown in T3 per Figure 7 per col. 19 lines 44-61

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the IP indexing in a static routing table of Nagami to the router of O'Dell because utilization of a static routing table with indexing is very fast and efficient of determine the relationship between a layer 3 destination address and a virtual connection.

5. Claims 5 & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dell

(U.S. Patent No.: 6,891,825) in view of Yamikita (U.S. Patent No.: 5,956,681) further in view of

Masuda (U.S. Patent No.: 6,678,474)

Referring to claim 5, the combination of O'Dell and Yamikita teach: the method of claim 1 and O'Dell teaches routing IP packet of the ingress traffic streams to a network interface port of an access device (PPP which are IP packets or ingress stream are routed to port on DSLAM which is an access device as shown in per Fig 6A) ; aggregating the IP packets into a combine traffic stream (Also performed by DSLAM)

The combination of O'Dell and Yamikita do not expressly call for: network interface port

Masuda teaches: network interface port (Line Card which is a network interface card which is a router on a card and consequently performs routing. The Line card has a port and also performs aggregation per col. 10 lines 46 to col. 11 lines 29)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the network interface port of Masuda in place of the DSLAM processing of the combination of O'Dell and Yamikita in order to save space by performing all of the function on one card instead of a whole chassis which is uses less space and is much more efficient.

Referring to claim 26, the combination of O'Dell and Yamikita teach: the system of claim 26 and O'Dell teaches routing IP packet of the ingress traffic streams to a network interface port of an access device (PPP which are IP packets or ingress stream are routed to port on DSLAM which is an access device as shown in per Fig 6A) ; aggregating the IP packets into a combine traffic stream (Also performed by DSLAM)

The combination of O'Dell and Yamikita do not expressly call for: network interface port

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Masuda teaches: network interface port (Line Card which is a network interface card which is a router on a card and consequently performs routing. The Line card has a port and also performs aggregation per col. 10 lines 46 to col. 11 lines 29)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the network interface port of Masuda in place of the DSLAM processing of the combination of O'Dell and Yamikita in order to save space by performing all of the function on one card instead of a whole chassis which uses less space and is much more efficient.

6. Claims 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller-

Tuberg (U.S. Patent No.: 6,504,844) in view of O'Dell (U.S. Patent No.: 6,891,825)

Referring to claim 20, Keller-Tuberg teaches: a method for routing traffic in an access network (The system per Fig 1 performs the method)

Receiving ingress internet Protocol (IP) packets from customer premise equipment, each IP packet having an address (The ATM card receives packets which are ingress packets being sent to the Internet from the subscriber computer or CPE wherein each packet inherently has a Source Address and Destination address per Fig 1 and per col. 4 line 52-col. 6 line 22.

Receiving egress IP packets from a backbone network for delivery of the CPE (An inherent router at each ISP receives egress IP packets from the Internet or backbone network for delivery to the subscriber computers or CPE per Fig 1 and per col. 6 lines 24-53)

Segmenting the ingress IP packets at a CPE interface of an access network into ingress asynchronous transport mode (ATM) adaption layer (AAL) cells wherein the ingress AAL cells include either or both of a virtual private interface and virtual connection interface (VPI/VCI) address generated from the IP address of the IP packets (The ATM card at the computer interface or CPE interface segments the packets into ingress AAL-5 with both a VP or VPI and VC or VCI per col. 4 line 52-col. 6 line 22).

Segmenting the egress IP packets at a network interface into egress AAL cells (The inherent edge router at the ISP has an inherent network interface that segments the IP packets into ATM cells.) providing the egress AAL cells in the access network into a single combined traffic (The egress AAL cells are provided to customer's ATM card of CPE per Fig 1 and per col. 6 lines 23-53. The exchange/ISP interface in the gateway aggregates the ingress traffic streams which are ATM at layer 2 into a combined traffic stream)

Keller Tuberg does not expressly call for: aggregating into a single combined traffic stream without regard to any destination of packet from the customer premise equipment

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O'Dell teaches: aggregating into a single combine traffic stream without regard to any destination of packet from the customer premise equipment (The DSLAM aggregates input from 605 or first ingress stream with input from 611 or second ingress stream with input from 613 or third ingress traffic stream into a combine stream which is output to 615 without regard to destination per col. 2 lines 16-45)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the aggregating into a single combine traffic stream without regard to any destination of packet from the customer premise equipment of O'Dell to the processing of Keller-Tuberg in order to implement DSL processing at the ingress part of the network which simplifies the processing required for access.

Regarding claim 21, ingress segmented into AAL-5 per col. 5 lines 37 and egress segmented into AAL-5 per col. 6 line 43.

Regarding claim 22, IP packets are inherently reassembled by ISP edge router per Figure 1.

Regarding claim 23, IP packets formed or delineated by ISP edge router per Fig 1.

Regarding claim 24, the source address is verified or validated per col. 6 lines 9-21.

Regarding claim 25, IP packet is discarded if the source address verified is invalid per col. 6 lines 9-21.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1, 3-7, 9-16, 18-33, 35-38 & 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

9. Referring to claims 1, 16, 20, & 26, what is meant by “aggregating the ingress traffic streams into a single combined traffic stream without regard to any path or destination of any packet from any ingress traffic stream” per claims 1 and similarly in claims 16, 20, & 26 respectively. How is it possible to send traffic without a path? How is it possible to send traffic without a destination address? How is it possible to send traffic without both a destination address and a path?

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 16-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 16, claim 16 appears to invoke 112/6th paragraph. Claim 16 is indefinite because the specification fails to clearly link the corresponding structure for means for routing egress traffic to specific structure. The examiner believes that Figure 2 is the closest to the claimed invention. The examiner believes that means for aggregating a plurality of ingress traffic streams ... can be mapped to the structure of RECEIVE INTERFACE which is part of the CPE INTERFACE CARD per Fig 2; however, the examiner cannot ascertain what structure maps to "means for routing egress traffic received from the backbone to CPE using a static routing table...; consequently, this claim is indefinite.

Referring to claim 18, claim 18 appears to invoke 112/6th paragraph. Claim 18 is indefinite because the specification fails to clearly link the corresponding structure for means for routing egress traffic to specific structure. The examiner believes that Figure 2 is the closest to the claimed invention. The examiner is confused as to whether means for segmenting IP packets .. maps to is performed by TRANSMIT INTERFACE of NETWORK INTERFACE CARD or TRANSMIT INTERFACE of CPE INTERFACE CARD. The examiner guesses that the means for switching structure is performed by ATM SWITCH in the SWITCH CORE. The examiner is also confused as to whether means for reassembling AAL cells into outgoing IP packets maps to the structure of TRANSMIT INTERFACE of NETWORK INTERFACE CARD or TRANSMIT INTERFACE of CPE INTERFACE CARD; consequently, this claim is indefinite.

Referring to claim 20, what is meant by: "segmenting the ingress packets at a CEP interface of access network ... wherein the ingress cells include either or both of a virtual private interface and virtual connection ingress generated from the IP address of a packet" and "aggregating the ingress AAL cells in the access network into a single combined traffic stream without regard to any path or destination of any packet from the customer premise equipment"? How does one have an address and then combine without regard to destination?

Referring to claim 26, claim 26 appears to be directed to a system but the claim limitations are directed to logic According to applicant's specification Pg 10 line 25 to Pg 11 line 6 logic is defined as software; consequently, the examiner is confused as to what statutory class of invention that the applicant is claiming.

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Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. Claims 26-33 and 36-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claim 26, assuming claim 26 was directed to an article of manufacture or apparatus then because "computer processable medium" can be interpreted as a transmission medium then that claim is directed to non-statutory subject matter.

The examiner suggest the applicant consider the following amendment:

A non transitory computer readable medium storing instructions executable by a processor that perform the following:

receiving a plurality of ingress traffic streams, each ingress traffic stream including a plurality of Internet Protocol (IP) packets having an IP address, aggregate the ingress traffic streams into a combined traffic stream without regard to any IP destination address of any IP packet in the ingress traffic stream and transmit the combine traffic stream to a backbone network for routing based on IP address.

The examiner also suggest that the applicant amend the dependent claims to The non-transitory computer readable medium of claim 26. Appropriate correction is required.

Specification

14. The disclosure is objected to because of the following informalities:

The examiner objects to the specification on Pg 15 lines 12-25 because the specification states that CPE IP packets are segmented into AAL cells then a VPI/VCI values which means that the Clearly the addition of the VPI/VCI is a destination address which is for routing the packets.

Consequently," aggregating the ingress traffic streams into a single combined traffic stream without regard to any path or destination of any packet from any ingress traffic stream" per claims 1 and similarly in claims 16, 20, & 26 is inconsistent with the specification. Clearly applicant specification teaches that the traffic is sent with a destination address as well as an inherent path associated with the VPI/VCI. The examiner recommends that either the applicant amend the claim to have antecedent basis for the specification or amend the specification to be consistent with the claimed material. Appropriate correction is required.

Drawings

14. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The examiner objects to the drawings because “aggregating the ingress traffic streams into a single combined traffic stream without regard to any path or destination of any packet from any ingress traffic stream” is not shown. Therefore, “aggregating the ingress traffic streams into a single combined traffic stream without regard to any path or destination of any packet from any ingress traffic stream” must be shown or the feature(s) canceled from the claim(s) 1, 16, 20, & 26. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

15. Claims 26-33 and 35-38 are objected to because of the following informalities:

Referring to claim 26, the examiner objects to the usage of “computer processable medium” because “computer processable medium” lacks antecedent basis with the specification. On Pg 10 line 33 and Pg 11 line 1 the specification provides antecedent basis for “computer readable medium”. The examiner suggests that the applicant amend the claim to “computer readable medium”. Appropriate correction is required.

Referring to claim 26, the examiner objects to the claim because it is unclear as to whether applicant is claiming a system or apparatus or article of manufacture. The examiner also objects to the usage of “logic stored in computer processable medium” because appears applicant is claiming “logic” and not hardware or system. The examiner also objects to the usage of “logic operable to” because “operable to” can be interpreted as a non positive claim limitation or optional use. The examiner suggest the applicant amend the claim to:

A non transitory computer readable medium storing instructions executable by a processor that perform the following:
receive a plurality of ingress traffic streams, each ingress traffic stream including a plurality of Internet Protocol (IP) packets having an IP address, aggregate the ingress traffic streams into a combined traffic stream without regard to any IP destination address of any IP packet in the ingress traffic stream and transmit the combine traffic stream to a backbone network for routing based on IP address.

The examiner also suggest that the applicant amend the dependent claims to The non-transitory computer readable medium of claim 26. Appropriate correction is required.

Response to Amendment

16. Applicant's arguments with respect to claims 1, 3-7, 9-16, 18-33, 35-38, & 40 have been considered but are moot in view of the new ground(s) of rejection.

17. In addition to the new grounds of rejection the examiner also provides the following response to the applicant's arguments filed 8/15/11 which have been fully considered but they are not persuasive because of the following:

The examiner respectfully disagrees with the applicant's argument that because the applicant did not respond to the 112/1st argument that that board partially affirmed the examiner's answer. The board reviewed applicant's specification and compared the examiner argument to the

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specification and affirmed the examiner position because applicant does not have support for "aggregating the ingress traffic streams into a single combined traffic stream without regard to any destination of any packet from any ingress traffic stream" and "the ingress AAL cells are aggregated ...in the access network into a single combined traffic stream without regard to any IP destination address of any packet from the customer premises equipment "

The applicant argues that a detailed description is provided on Pg 13 lines 13-18, Pg 17 lines 1-21, Pg 18 lines 1-24 and Pg 19 lines 1-24 provides support for "aggregating the ingress traffic streams into a single combined traffic stream without regard to any destination of any packet from any ingress traffic stream".

The examiner believes that applicant specification does have written description and support for "aggregating the ingress traffic streams into a single combined traffic stream without regard to any IP destination address of any packet from any ingress traffic stream and transmitting the single combined traffic stream to a backbone router for routing based upon destination IP address".

The examiner acknowledges that applicant's specification states that plurality of ingress streams are aggregated and that the streams have an IP address and packets are combined into a single stream regardless of final destination. The combined traffic stream is transmitted to a backbone network for routing based on the IP address per pg 3 lines 15 to 30. On Pg 4 lines 1-10 of applicant's specification the ingress IP packets are segmented at each CPE port using a fixed ATM address. One of ordinary skill in the art at the time of the invention would know that in order for this invention to work that the IP packets are segmented into ATM cells which have VPI/VCI which are routed as ATM cells to the Backbone Router where the IP packets are reassembled and routed by the backbone router based upon IP destination address; consequently, the packets are routed based upon a ATM VPI/VCI or ATM destination address

The applicant argues that a detailed description is provided on Pg 13 lines 13-18, Pg 17 lines 1-21, Pg 18 lines 1-24 and Pg 19 lines 1-24 provides support for "ingress IP packets are segmented ...at the CPE interface of an access network into ingress asynchronous transport mode (ATM) adaption layer (AAL) cells and the ingress AAL cells are aggregated ...in the access network into a single combined traffic stream without regard to any destination of any packet from the customer premises equipment "

The examiner believes that applicant specification does have written description and support for "ingress IP packets are segmented ...at the CPE interface of an access network into ingress asynchronous transport mode (ATM) adaption layer (AAL) cells and the ingress AAL cells are aggregated ...in the access network into a single combined traffic stream without regard to any IP destination address of any packet from the customer premises equipment "

The examiner respectfully disagrees with applicant's argument that applicant's specification provides written description support for "ingress IP packets are segmented ...at the CPE interface of an access network into ingress asynchronous transport mode (ATM) adaption layer

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(AAL) cells and the ingress AAL cells are aggregated ...in the access network into a single combined traffic stream without regard to any destination of any packet from the customer premises equipment" because according to applicant's specification the combined traffic stream is transmitted to a backbone network for routing based on the IP address per pg 3 lines 15 to 30. On Pg 4 lines 1-10 of applicant's specification the ingress IP packets are segmented at each CPE port using a fixed ATM address. One of ordinary skill in the art at the time of the invention would know that in order for this invention to work that the IP packets are segmented into ATM cells which have VPI/VCI which are routed as ATM cells to the Backbone Router where the IP packets are reassembled and routed by the backbone router based upon IP destination address.

One of ordinary skill in the art at the time of the invention knows that from a technical standpoint claiming to aggregate traffic which is IP traffic and then segmenting IP traffic into ATM cells which are then transmitted to a backbone router via ATM VPI/VCI or ATM destination address; consequently, applicant's argument is not persuasive and the 112/1st rejection is not being withdrawn.

The applicant argues that the 112/2nd rejection should also be withdrawn because one of ordinary skill in the art at the time of the invention would know how to make and use the invention because the written description is enabling. The examiner respectfully disagrees because one of ordinary skill in the art at the time of the invention would not know how make and use a device which "aggregates the ingress traffic without regard to any destination of any packet from any ingress traffic stream and transmitting the combined traffic stream to backbone network for routing". Clearly one of ordinary skill in the art at the time of the invention would know that in order for this invention to work that the IP packets are segmented into ATM cells which have VPI/VCI which are routed as ATM cells to the Backbone Router where the IP packets are reassembled and routed by the backbone router based upon IP destination address; consequently, the packets are routed based upon a ATM VPI/VCI or ATM destination address.

The applicant argues that the 112/2nd rejection should also be withdrawn because one of ordinary skill in the art at the time of the invention would know how to make and use the invention because the written description is enabling. The examiner respectfully disagrees because one of ordinary skill in the art at the time of the invention would not know how make and use a device which "ingress IP packets are segmented ...at the CPE interface of an access network into ingress asynchronous transport mode (ATM) adaption layer (AAL) cells and the ingress AAL cells are aggregated ...in the access network into a single combined traffic stream without regard to any destination of any packet from the customer premises equipment" Clearly one of ordinary skill in the art at the time of the invention would know that in order for this invention to work that the IP packets are segmented into ATM cells which have VPI/VCI which are routed as ATM cells to the Backbone Router where the IP packets are reassembled and routed by the backbone router based upon IP destination address; consequently, the packets are routed based upon a ATM VPI/VCI or ATM destination address.

The examiner respectfully disagrees with applicant argument that the 112/2nd rejection should be traversed because applicant's specification Pg 13 lines 13-18, Pg 17 lines 1-21, Pg

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18 lines 1-24 and Pg 19 lines 1-24 provides support for “aggregating the ingress traffic streams into a single combined traffic stream without regard to any path or destination of any packet from any ingress traffic stream” per claims 1 and similarly in claims 16, 20, & 26 because one of ordinary skill in the art at the time of the invention would know say how is it possible to send traffic without a path? How is it possible to send traffic without a destination address? How is it possible to send traffic without both a destination address and a path?

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT WILSON whose telephone number is (571)272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Dang Ton can be reached on 571/272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert W Wilson/
Primary Examiner, Art Unit 2475

RWW
10/7/11

